



10/537718



JC20 Rec'd PCT/PTO 03 JUN 2005

WesternGeco Seismic Holdings Limited
% Marks & Clerk
4220 Nash Court
Oxford Business Park South
OXFORD
OX4 2RU

The Patent Office
Patents Directorate

Concept House
Cardiff Road, Newport
South Wales NP10 8QQ

Examiner: 01633 814459
E-mail: robert.mumford@patent.gov.uk
Switchboard: 01633 814000
Fax: 01633 814444
Minicom: 08459 222250
DX 722540/41 Cleppa Park 3
<http://www.patent.gov.uk>

Your Reference: AMS.P52461GB
Application No: GB 0228484.2

11 April 2003

Dear Sirs

Patents Act 1977: Search Report under Section 17(5)

I enclose two copies of my search report and a copy of the citation.

Plurality of invention

I consider that your application relates to more than one invention as follows:

- (1) A system for determining a propagation time delay as claimed in claims 1 - 23.
- (2) A library system as claimed in claims 24 - 42.

My search report relates to the first invention only. If you want the other invention searched, you should file a further Patents Form 9/77.

Publication

I estimate that, provided you have met all formal requirements, preparations for publication of your application will be completed soon after **27 April 2004**. You will then receive a letter informing you of completion and telling you the publication number and date of publication.

Amendment/withdrawal

[†]Use of E-mail: Please note that e-mail should be used for correspondence only.



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INVESTOR IN PEOPLE

Application No: GB 0228484.2

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If you wish to file amended claims for inclusion with the published application, or to withdraw the application to prevent publication, you must do so before the preparations for publication are completed. **No reminder will be issued.** If you write to the Office less than 3 weeks before the above completion date, please mark your letter prominently:

"URGENT - PUBLICATION IMMINENT".

Yours faithfully

Robert C Mumford
Examiner



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Application No: GB 0228484.2
Claims searched: 1 - 23

Examiner: Robert C Mumford
Date of search: 10 April 2003

Patents Act 1977 : Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
A	-	FR 002772931 A (GEOPHYSIQUE CIE)

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^v:

G1G

Worldwide search of patent documents classified in the following areas of the IPC⁷:

G01S, G01V

The following online and other databases have been used in the preparation of this search report:

Online WPI, EPODOC, JAPIO

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PN - FR2772931 A 19990625

PD - 1999-06-25

PR - FR19970016497 19971224

OPD - 1997-12-24

TI - System for monitoring the placement of a seismic cable, from a ship, onto the sea bed.

AB - The seismic cable includes a number of acoustic transmitters spread along it each of which transmits an identifiable acoustic signal. The system includes a floating network having at least three acoustic receiver units (T,B,Q), with means for knowing the position of these units (T,B,Q) with respect to the ship (V). The system has also means for transmitting to a processing unit the time corresponding to receipt, by the receiver units (T,B,Q), of signals from the acoustic cable transmitters (P). The processing unit includes means for calculating, from these time and position values the position of the acoustic transmitters and therefore the trajectory of the cable as it is unrolled from the ship.

IN - BOUCQUAERT FRANCOIS;LECOQ FREDERIC

PA - GEOPHYSIQUE CIE GLE (FR)

EC - G01V1/38C

IC - G01V1/38

CT - US5497356 A [Y]; EP0308222 A [A]; EP0267840 A [A];
FR2620536 A [A]; XP000312715 A [Y]

CTNP- [Y] BELL B M ET AL: "NONLINEAR KALMAN FILTERING OF
LONG-BASELINE, SHORT-BASELINE, GPS, AND DEPTH
MEASUREMENTS"
PROCEEDINGS OF THE ASILOMAR CONFERENCE ON
SIGNALS, SYSTEMS
AND COMPUTERS, PACIFIC GROVE, NOV.4 - 6, 1991, vol. 1,
no.
CONF. 25, 4 novembre 1991, pages 131-136, XP000312715
CHEN R R

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TI - System for monitoring the placement of a seismic cable, from a ship, onto the sea bed.

PR - FR19970016497 19971224

PN - FR2772931 A1 19990625 DW199938 G01V1/38 012pp

PA - (GEOP-N) CIE GEN GEOPHYSIQUE

IC - G01V1/38

IN - BOUCQUA F; LECOQ F

AB - FR2772931 NOVELTY - The seismic cable includes a number of acoustic transmitters spread along it each of which transmits an identifiable acoustic signal. The system includes a floating network having at least three acoustic receiver units (T,B,Q), with means for knowing the position of these units (T,B,Q) with respect to the ship (V). The system has also means for transmitting to a processing unit the time corresponding to receipt, by the receiver units (T,B,Q), of signals from the acoustic cable transmitters (P). The processing unit includes means for calculating, from these time and position values the position of the acoustic transmitters and therefore the trajectory of the cable as it is unrolled from the ship.

- USE - For monitoring seismic cable laying on sea bed.
- ADVANTAGE - Enables the following in real time of seismic cable laying in deep water.
- DESCRIPTION OF DRAWING(S) - The drawing shows a pictorial view of the cable laying operation

- receivers T,B,Q

- transmitters P

- ship V

- (Dwg.1/1)

OPD - 1997-12-24

AN - 1999-446623 [38]